

REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.116, and in light of the remarks which follow, are respectfully requested.

Claim 1 has been amended to add a proviso that when carbon black is present in the claimed composition, it is only present as a silica-coated carbon black or as a blend with a reinforcing inorganic filler wherein the carbon black in the blend is present in a mass fraction less than 50%. Support for this feature is provided in paragraphs [065] and [066] of the specification. Claims 1-13 remain pending in this application.

The allowance of claim 9 is acknowledged with appreciation.

Claims 1-4, 10 and 12 were finally rejected under 35 U.S.C. §102(b) as anticipated by or, alternatively, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 3,135,716 to Uranek et al. for the reasons set forth on page 2 of the Office Action. Reconsideration of these rejections is respectfully requested in view of the above amendment and for at least the reasons which follow.

Uranek et al. '716 has been cited for the disclosure of a composition containing a polybutadiene elastomer having carboxy end groups and a high abrasion furnace black. Applicants previously argued that carbon black is not an inorganic reinforcing filler but instead, is an organic filler. The Examiner disagrees.

In support of their position, Applicants are submitting a copy of page 527 of the Handbook of Composites, 2d Ed. (1998) and a copy of page 458 of the Plastics Engineering Handbook (1998). U.S. Patent No. 6,451,935 (column 9, line 48) and 6,306,976 (column 20, line 32) also refer to carbon black as organic. However,

Applicants are also aware of U.S. Patent No. 6,414,081 (column 12, lines 4-5) which refers to carbon black as inorganic.

In view of the confusion concerning the classification of carbon black, Applicants have amended claim 1 in the manner discussed above. Since the carbon black used in the compositions of Uranek et al. '716 is excluded by the present claims, the §102(b) rejection should be withdrawn.

The claims also were rejected as *prima facie* obvious over Uranek et al. '716. There is no disclosure in the reference which would motivate those of ordinary skill in the art to use silica-coated carbon black or blends of carbon black and inorganic reinforcing filler in place of the high abrasion furnace black in the composition of the reference. Accordingly, the alternative rejection over Uranek et al. '716 under 35 U.S.C. §103(a) should be withdrawn.

Claims 1-8 and 10-13 were rejected under 35 U.S.C. §102(b) as anticipated by or, alternatively, under 35 U.S.C. §103(a) as obvious over Uranek et al. '716 in view of U.S. Patent No. 5,489,627 to Sandstrom or U.S. Patent No. 5,962,575 to Yatsuyanagi et al. for the reasons given on page 3 of the Final Rejection. Reconsideration and withdrawal of these rejections are requested in view of the above amendment and the following remarks.

It has been held that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628,631, 2 USPQ2d 1051,1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226,1236, 9 USPQ2d 1913,1920 (Fed. Cir. 1989). Since the §102(b)

rejection relies on secondary art, it is respectfully submitted that the rejection is improper and should be withdrawn.

With regard to the rejection under §103(a), in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The motivation to modify the relied on prior art must flow from some teaching in the art that suggests the desirability or incentive to make the modification needed to arrive at the claimed invention. *In re Napier*, 55 F.2d 610,613; 34 U.S.P.Q. 2d 1782,1784 (Fed. Cir. 1995). Obviousness cannot be established by modifying the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the modification. *In re Geiger*, 815 F.2d 686,688, U.S.P.Q.2d 1276,1278 (Fed. Cir. 1987).

Yatsuyanagi et al. '575 discloses elastomeric compositions which may contain a silica-coated carbon black. This reference does not appear to disclose diene elastomers having a carboxyl function at one or both chain ends. Thus, one of ordinary skill in this art would not be motivated to substitute the filler of Yatsuyanagi et al. '575 for the carbon black filler of Uranek et al. '716 in the absence of any teaching that the substitution would improve the properties of the cured compositions.

Sandstrom '627 discloses elastomeric compositions composed mainly of a diene elastomer with small amounts of an epoxidized rubber and a carboxylated nitrile rubber. The compositions contain silica and a silica coupling agent. Since Uranek et al. '716 does not disclose or suggest the use of silica, no motivation exists for adding a silica coupling agent.

It is clear from the above arguments that there is no teaching, suggestion or incentive in the cited prior art which would motivate those of ordinary skill in this art to modify the compositions of Uranek et al. '716 in the manner suggested by the Examiner. Nor was there a reasonable expectation that modifying the compositions of Uranek et al. '716 by replacing carbon black with silica-coated carbon black or with silica plus a coupling agent would be successful and lead to improved properties of the compositions.

In view of the above amendment and arguments, the §103(a) rejection based on Uranek et al. '716 in view of Sandstrom '627 or Yatsuyanagi et al. should be withdrawn. Such action is earnestly requested.

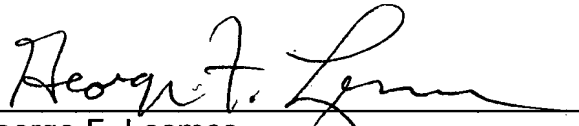
From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: May 14, 2004

By:

A handwritten signature in black ink, appearing to read "George F. Lesmes", written over a horizontal line.

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